Suitable for continuous operation – fanless 1-litre PC

Barebone XS35V3

Slim PC

The XS35V3 is a thrifty barebone suitable for building of particularly slim nettops with drives and operating system, as well as for purely network-based applications in client/server environments. The pre-installed Intel Atom D2700 processor clocked at 2x 2.13 GHz offers sufficient computing power for a wide range of possible applications. The XS35V3 comes completely fanless which helps cut down on operating noise and expensive servicing as there are no moving parts in the machine. Equipped with the relevant hard drives or flash memory/SSDs, the XS35V3 is suitable for continuous 24/7 operation.

Fanless

Feature Highlights

Chassis	• Slim 1.5 litre chassis • Dimensions: 25.2 x 16.2 x 3.85 cm • Hole for the Kensington Lock • Optional: VESA75/100 mounting kit PV01
Operating system	• Without operating system • Compatible with Windows 7 (32 bit)
CPU	• Intel Atom D2700 Dual Core (2.13GHz)
Chipset	• Intel NM10 Express Chipset
Graphics	• Integrated Intel GMA3650 Graphics • Shared Memory: max. 384MB DVMT
Memory	• 2x SO-DIMM socket (204 pins) • Supports max. 4GB DDR3-1066
Storage	• Supports one optical slimline drive • Supports one 2.5" SATA hard disk or SSD • With 4-in-1 card reader
Connectors and WLAN	• HDMI v1.3 • D-Sub VGA • 5x USB 2.0 (1x front, 4x rear) • Microphone input • Headphones output (Line-out) • Gigabit-LAN • WLAN 802.11 b/g/n
Power supply	• External 40W fanless power supply
Applications	• Basic and Home-Media

Images are only for illustration purposes.
The optical drive is not included.

8 11686 00378 6

Shuttle order no: PEB-XS35U301

©2012 by Shuttle Computer Handels GmbH (Germany). All information subject to change without notice. Pictures for illustration purposes only.

www.shuttle.com

Shuttle Computer Handels GmbH
Fritz-Strassmann-Str. 5
25337 Elmshorn | Germany

Tel. +49 (0) 4121-47 68 60
Fax +49 (0) 4121-47 69 00
sales@shuttle.eu

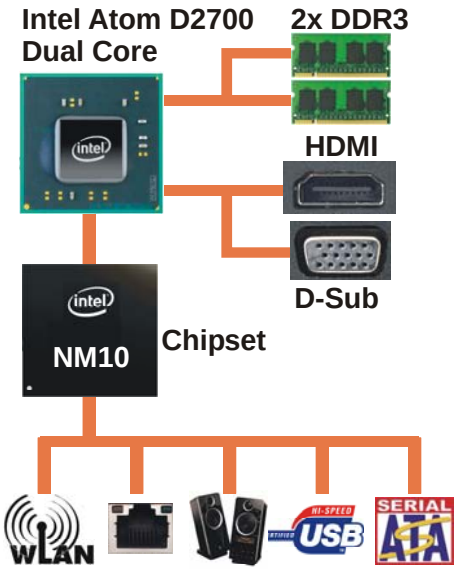
Shuttle Barebone XS35V3 - Product Features

Slim and stylish

Designed as a space-saver, this sleek 1.5 litre nettop PC only measures 3.8cm in width. It maximizes space whether it is placed upright using its stylish stand or affixed to the back of a display with the optional VESA mounting kit (PV01). Due to its small size and flexible design, this practical nettop offers exceptional functionality and is well-suited for home users, small offices, reception areas, classrooms, libraries, showrooms, call centres, public institutions and more.

Fanless and quiet

The Shuttle Barebone XS35V3 comes totally fanless making it perfect to be used in noise-sensitive environments such as living rooms, hospitals, libraries etc. As an additional benefit, fanless cases rarely gather dust on the inside and stay cleaner than others. So it's not only quiet and low in energy use, but also dust-free and virtually maintenance free.



The Atom processor integrates the graphics controller

Shuttle XS35V3 is equipped with Intels Atom D2700 processor (2,13GHz, codenamed Cedarview). It comes with both the memory controller and graphics core on-die which helps to keep heat dissipation and memory latency low. The CPU is connected to the Southbridge NM10, codenamed Tiger Point.

Dual Core. Do more.

Shuttle always uses the dual-core variant of Intel's Atom processors and thus integrates the Atom D2700. This boosts the system performance significantly with particular regards to multi-threaded applications.

Highly energy-saving

The XS35V3 barely consumes, depending on system load, about 16~20 Watts. Running the device*) 5 days a week for eight hours a day, the annual consumption would amount to less than 40kWh which would mean just 8 Euros on the power bill (20 Euro ct/kWh) - way less than a conventional desktop PC draws.

*) Based on a configuration with 2GB of memory, 160GB hard disk and Windows 7

©2012 by Shuttle Computer Handels GmbH (Germany). All information subject to change without notice. Pictures for illustration purposes only.

Shuttle Computer Handels GmbH
Fritz-Strassmann-Str. 5
25337 Elmshorn | Germany

Tel. +49 (0) 4121-47 68 60
Fax +49 (0) 4121-47 69 00
sales@shuttle.eu

What does "Barebone" mean?

Shuttle's barebones line such as the XS35V3 is targeted at experienced users seeking to build a complete system to meet their individual requirements. The bulk of components is yet built in, simply the following hardware is to be installed upon purchase in this case:

- One 6.35 cm/2.5" Serial ATA hard disk or Solid State Disk (SSD)
- One or two DDR3 SO-DIMM memory modules (204 pins), max. 4 GB
- USB keyboard and USB mouse
- Optional: Slim-line optical drive (12.7mm height, DVD/Blu-ray, slimline format)
- Operating system: Windows 7, 32 bit

Two monitor support with HDMI (DVI) and D-Sub/VGA

The integrated graphics supports multiple display support on up to two separate monitors via HDMI (DVI through optional adapter) and D-Sub/VGA. This improves the capabilities and productivity of the user by allowing them to spread multiple windows over two monitors and view them simultaneously.

4-in-1 card reader

The built-in 4-in-1 card reader at the front side makes it easy to transfer files from your camera so you can share videos and photos on your XS35V3 with ease.

Kensington Lock

This is a small, metal-reinforced hole as part of an anti-theft system. As known from notebooks, this Mini-PC can also be safely locked by tieing it to a solid object.
(The lock-and-cable apparatus is not included.)

Optional second hard disk (Accessory PHD2)

The optional accessory PHD2 supports a second 2.5" hard disk. Please note, that the bay for the optical drive will be occupied then.

©2012 by Shuttle Computer Handels GmbH (Germany). All information subject to change without notice. Pictures for illustration purposes only.

Shuttle Computer Handels GmbH
Fritz-Strassmann-Str. 5
25337 Elmshorn | Germany
Tel. +49 (0) 4121-47 68 60
Fax +49 (0) 4121-47 69 00
sales@shuttle.eu

Tiny power adapter

The external 40W power adapter is virtually noiseless and can easily be hidden behind the desk thanks to its tiny dimensions.
Dimensions: 89.5 x 37 x 26.5 mm (LWH) = 88ml

Easy installation

Remove just one screw to unmount the two chassis covers.

Optional VESA mount (Accessory PV01)

Its optional VESA75/100 wallmount allows it to be installed on to walls or just affixed on the rear side of a monitor which is particularly interesting for the industry segment, company buildings and public institutions.

24/7 nonstop operation

Shuttle XS35V3 is officially approved for 24/7 permanent operation. Thanks to its low power consumption and completely passively cooling, this PC runs highly reliable making it perfectly suitable for digital signage and POI/POS applications.

<u>Conditions for permanent use:</u>
- Ambient temperature while under load: 5-35°C
- Air humidity while under load: 10-90% (not condensing)
- Free circulation of air amongst the PC must be guaranteed
- Ventilation holes must be clear
- If a hard disk is installed, this must also be approved for permanent operation by its manufacturer (max. one hard disk)

Note on operating position

Please make sure the system is always placed upright using either its stand or the optional VESA mount. Ventilation holes must not be blocked to ensure sufficient cooling.

©2012 by Shuttle Computer Handels GmbH (Germany). All information subject to change without notice. Pictures for illustration purposes only.

Shuttle Computer Handels GmbH
Fritz-Strassmann-Str. 5
25337 Elmshorn | Germany

Tel. +49 (0) 4121-47 68 60
Fax +49 (0) 4121-47 69 00
sales@shuttle.eu

Shuttle Barebone XS35V3 Specifications

Fanless and silent	Passive cooling, no fan noise at all Perfect to be used in noise-sensitive environments Fanless, dust-free and thus virtually maintenance-free
Chassis	Dimensions without Stand: 25.2 x 16.2 x 3.85 cm (DxHxW) Weight: 2.1 kg net, 2.8 kg gross Hole for the Kensington Lock at the back panel Optional accessory: 75mm and 100mm VESA mounting kit (PV01)
Operation System	This system comes without operating system. It is compatible with Windows 7 (32 bit)
Processor	Intel Dual Core Atom processor D2700 (Codename: Cedarview) Intel Hyper-Threading technology: 2-threads per core 32 nm manufacturing process, Micro-FCBGA11 package Intel 64 architecture, Core clock: 2.13 GHz L2 Cache: 1024kB , TDP: max. 10W Supports SSE2, SSE3, SSSE3, Execute Disable Bit Integrated North Bridge with controller for memory and graphics
Cooling	Passive, completely fanless cooling through convective heat transfer Warning: Please make sure the system is always placed upright using either its stand or the optional VESA mount. Ventilation holes must not be blocked to ensure sufficient cooling.
Chipset	Intel® NM10 Express Chipset (south bridge) Platform Controller Hub (PCH) Code name: Tiger Point
BIOS	AMI BIOS in a 8Mbit Flash ROM supports PnP, ACPI 2.0 Supports external USB flash memory card boot up Supports Power fail resume / AC power on state / always on / always off Supports Wake-on-LAN (WOL) from S3, S3, S5 ACPI states Supports Unified Extensible Firmware Interface (UEFI)
Memory	2x SO-DIMM slots with 204 pins Supports two modules DDR3-1066 (PC3-8500) DDR3-1333 is supported at DDR3-1066 clock rate Supported maximum capacity: 4 GB
Optical drive (opt.)	Support an optical DVD or Blu-ray slim-line drive Serial ATA interface, 12.7mm height, Slimline SATA connector

©2012 by Shuttle Computer Handels GmbH (Germany). All information subject to change without notice. Pictures for illustration purposes only.

Shuttle Computer Handels GmbH
Fritz-Strassmann-Str. 5
25337 Elmshorn | Germany

Tel. +49 (0) 4121-47 68 60
Fax +49 (0) 4121-47 69 00
sales@shuttle.eu

Hard disk drive or SSD	Supports one Serial ATA hard disk (5400 / 7200 rpm) or one SATA SSD drive in 6.35cm/2.5" format The SATA 2.0 interface supports up to 300MB/s data transfer speed Supports a drive with 9.5mm height (12.5mm is not supported) Supports Unified Extensible Firmware Interface (UEFI)
Integrated Graphics	The Graphics Processing Unit (GPU) is integrated into the processor Intel GMA 3650, Graphics Base Frequency: 640 MHz Supports DirectX 9 Maximum shared memory: 8MB pre-allocated plus 384MB Video Memory Technology (DVMT) Two video outputs: HDMI v1.3 and D-Sub (VGA) Supports dual display in clone or extended mode
Integrated Audio	Integrated Audio IDT92HD81 Audio Codec with Azalia support Two analog audio connectors (3.5mm): 1) Line out (head phone) 2) microphone input Supports digital 7.1 HD audio via the HDMI port.
Card Reader	4-in-1 card reader at the front side Supports SDHC, SD, MS und MS-pro memory cards PCIe Interface
Wired Network	RJ45 connector supports Gigabit LAN at 10/100/1000 Mbit/sec. Network controller JMC 251 Supports Wake-on-LAN (WOL) from S3, S3, S5 ACPI states
Wireless Network	Supports IEEE 802.11b/g/n, max. 150Mbps up-/downstream Security: WPA/WPA2(-PSK), WEP 64/128bit, IEEE 802.11x/i Half size Mini-PCIe-Card
Connectors	HDMI v1.3 digital video and audio output D-Sub/ VGA analog video (15 pin) 5x USB 2.0 (1x front, 4x rear) Gigabit network (LAN, RJ45) Audio Line-out (head phone) Microphone input DC input for the external power adapter
LEDs and buttons	Power button Power LED (white) Hard disk LED (blue)
Power supply	External 40W AC/DC power adapter (fanless), 19V / 2.1A AC Input: 100~240V AC, 50~60Hz Automatic voltage adjust Dimensions: 89.5 x 37 x 26.5 mm (LWH) DC Connector: 5.5/2.5mm (outer/inner diameter)

©2012 by Shuttle Computer Handels GmbH (Germany). All information subject to change without notice. Pictures for illustration purposes only.

Shuttle Computer Handels GmbH
Fritz-Strassmann-Str. 5
25337 Elmshorn | Germany

Tel. +49 (0) 4121-47 68 60
Fax +49 (0) 4121-47 69 00
sales@shuttle.eu

Optional accessories	- VESA mount made of metal (PV01) - Adapter for second 2.5" drive instead of optical drive (PHD2)
24/7 nonstop operation	This device is approved for 24/7 permanent operation. Requirements: - Free circulation of air amongst the PC must be guaranteed. - Ventilation holes must be clear. - If a hard disk is installed, this must also be approved for permanent operation by its manufacturer (max. one hard disk)
Environ-mental spec.	Operating temperature range: 0~35°C Relative humidity range: 10~90% (non-condensing)
Certification and Compliance	EMI: CE, FCC, BSMI, C-Tick, CCC Safety: CB, BSMI, ETL Other compliances: RoHS, Eup Lot6 This device is classed as a technical information equipment (ITE) in class B and is intended for use in living room and office. The CE-mark approves the conformity by the EU-guidelines: - EMV-guideline 89/336/EWG electromagnetic tolerance - LVD-guideline 73/23/EWG use of electric devices within certain voltage-limits

Comparison: Shuttle Slim-PC Barebone PC XS35/XS36 Series

Model	Graphics	HDMI	DVI	D-Sub	RS232	WOL	Processor	Memory (SO-DIMM)	Other
XS35	Intel GMA3150	-	-	Yes	-	-	Intel Atom D510 (2x 1.66GHz)	Max. 2GB DDR2-800 1x SO-DIMM slot	Fast Ethernet
XS35GT	NVIDIA ION2	Yes	-	Yes	-	-			
XS35V2	Intel GMA3150	-	-	Yes	-	-	Intel Atom D525 (2x 1.80GHz)	Max. 4GB DDR3-800 1x SO-DIMM slot	Gigabit LAN
XS35GT V2	NVIDIA ION2	Yes	-	Yes	-	-			
XS35GTA V2	ATI Mobility Rad. HD 5430	Yes	-	Yes	-	-			
XS35V3	Intel GMA3650 [2]	Yes	-	Yes	-	Yes [3]	Intel Atom D2700 (2x 2.13GHz)	Max. 4GB DDR3-1066 2x SO-DIMM slots	Gigabit LAN
XS35GTA V3 [1]	ATI Radeon HD 7410M	Yes	-	Yes	-	Yes [3]			
XS36V	Intel GMA3650 [2]	Yes	Yes	Yes	2x	Yes [3]			

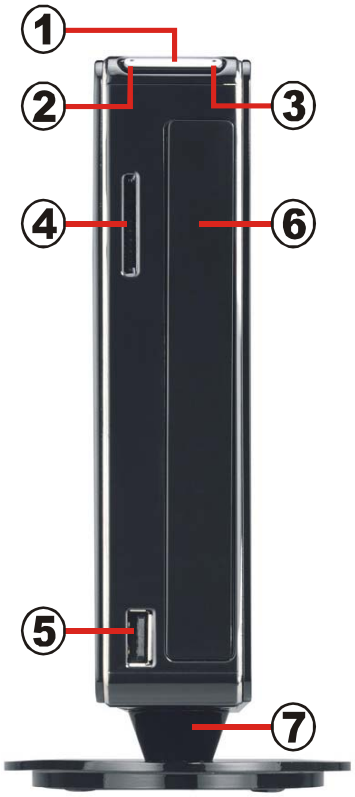
[1] **XS35GTAV3** is also called **XS35GS V3** outside EU.
[2] Intel offers sophisticated graphics driver for the integrated **Intel GMA3650** graphics only for Windows 7 32 bit. Linux can be used in standard graphics mode without video acceleration. (date April 2012)
[3] Supports Wake-on-LAN (WOL), Power fail resume and Resume by RTC Alarm

©2012 by Shuttle Computer Handels GmbH (Germany). All information subject to change without notice. Pictures for illustration purposes only.

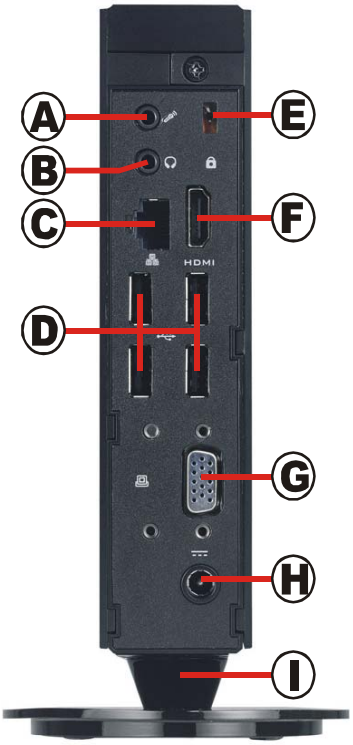
Shuttle Computer Handels GmbH
Fritz-Strassmann-Str. 5
25337 Elmshorn | Germany
Tel. +49 (0) 4121-47 68 60
Fax +49 (0) 4121-47 69 00
sales@shuttle.eu

Shuttle Barebone XS35V3 – Connectors

Front Panel



Back Panel



1 Power button
2 Power LED
3 Hard disk LED
4 4-in-1 card reader
5 USB connector
6 Bay for the optical slimline drive *)
7 Vertical stand

A Microphone input
B Head phone output (Line out)
C Gigabit LAN connector (RJ45)
D 4x USB connectors
E Hole for the Kensington-Lock
F HDMI connector
G D-Sub/VGA connector
H Connector for the power adapter
I Vertical stand

*) Note: The optical drive is not included.

Warning:
Please make sure the system is always placed upright using either its stand or the optional VESA mount. Ventilation holes must not be blocked to ensure sufficient cooling.

©2012 by Shuttle Computer Handels GmbH (Germany). All information subject to change without notice. Pictures for illustration purposes only.

Shuttle Computer Handels GmbH
Fritz-Strassmann-Str. 5
25337 Elmshorn | Germany

Tel. +49 (0) 4121-47 68 60
Fax +49 (0) 4121-47 69 00
sales@shuttle.eu

Images are only for illustration purposes. The optical drive is not included.

©2012 by Shuttle Computer Handels GmbH (Germany). All information subject to change without notice. Pictures for illustration purposes only.

Shuttle Computer Handels GmbH
Fritz-Strassmann-Str. 5
25337 Elmshorn | Germany

Tel. +49 (0) 4121-47 68 60
Fax +49 (0) 4121-47 69 00
sales@shuttle.eu